

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

1 1. (Original) A reliability buffering method associated with a project planning model having
2 project plan data and having a plurality of activities, wherein each or the plurality of activities
3 has one or more activity time precedence relationships, comprising:

4 adding activity characteristics data to the project plan data;

5 generating a reliability buffer duration value corresponding to the project plan data; and

6 placing a reliability buffer in front of a downstream activity.

1 2. (Original) The reliability buffering method of claim 1, further comprising:

2 adding activity relationship data to the project plan data.

1 3. (Original) The reliability buffering method of claim 1, further comprising:

2 altering the one or more activity time precedence relationships.

1 4. (Original) A reliability buffering method associated with a project planning model having
2 project plan data, having a project schedule, and having a plurality of activities, comprising:

3 selecting a downstream activity from among the plurality of activities;

4 adding activity relationship data associated with the downstream activity and with at least
5 one upstream activity to the project plan data;

6 adding activity characteristics data associated with the downstream activity to the project
7 plan data; and

8 placing a reliability time buffer in a buffer time precedence relationship with the
9 downstream activity to provide a buffered downstream activity.

1 5. (Original) The reliability buffering method of claim 4, wherein adding activity relationship
2 data comprises:
3 adding a downstream sensitivity value associated with the activity time precedence
4 relationship to the project plan data.

1 6. (Original) The reliability buffering method of claim 4, wherein adding activity characteristics
2 data comprises:
3 adding an activity reliability value to the project plan data.

1 7. (Original) The reliability buffering method of claim 4, wherein adding activity characteristics
2 data comprises:
3 adding an activity production rate value to the project plan data.

1 8. (Original) The reliability buffering method of claim 4, wherein the buffer time precedence
2 relationship is finish to start.

1 9. (Original) The reliability buffering method of claim 4, further comprising:
2 generating a reliability buffer duration value associated with the reliability buffer and
3 corresponding to the project plan data; and
4 generating an activity time precedence relationship between the buffered downstream
5 activity and the at least one upstream activity, corresponding to the project plan data, to provide
6 an initial reliability buffer project plan.

1 10. (Original) The reliability buffering method of claim 9, wherein the activity time precedence
2 relationship is selected from the group consisting of finish to start, finish to finish, start to start,
3 and start to finish.

1 11. (Original) The reliability buffering method of claim 9, wherein generating the reliability
2 buffer duration value comprises:

3 selecting one or more upstream activities associated with the downstream activity from
4 among the plurality of activities; and
5 generating a reliability buffer duration value that reduces a simulated schedule delay to
6 the project schedule that occurs due to simulated schedule delays of respective ones of the one or
7 more upstream activities, and that increases a simulated schedule advance to the project schedule
8 that occurs due to simulated schedule advances of respective ones of the one or more upstream
9 activities.

1 12. (Original) The reliability buffering method of claim 11, wherein generating the reliability
2 buffer duration value comprises:

3 selecting a plurality of reliability buffer duration values; and
4 for each of the plurality of reliability buffer duration values,
5 generating a simulated project schedule and a simulated project cost;
6 analyzing the simulated project schedules and the simulated project costs
7 associated with the plurality of reliability buffer duration values; and
8 selecting the reliability buffer duration value and the associated project schedule
9 corresponding to a smallest simulated project schedule or associated with a smallest simulated
10 project cost.

1 13. (Original) The reliability buffering method of claim 9, wherein generating the activity time
2 precedence relationship comprises:

3 selecting a time precedence relationship from the group consisting of a finish to start
4 relationship, a finish to finish relationship, a start to finish relationship, and a finish to start
5 relationship;
6 selecting one or more upstream activities associated with the downstream activity from
7 among the plurality of activities; and
8 generating a reliability buffer lead or lag value that reduces a simulated schedule delay to
9 the project schedule that occurs due to simulated schedule delays of respective ones of the one or
10 more upstream activities, and that increases a simulated schedule advance to the project schedule

11 that occurs due to simulated schedule advances of respective ones of the one or more upstream
12 activities.

1 14. (Original) The reliability buffering method of claim 9, further comprising:
2 adding policy data to the project plan data.

1 15. (Currently Amended) The reliability buffering method of claim 14, wherein adding policy
2 data comprises:
3 adding at least one of:
4 a manpower availability versus time value;
5 a overtime and flexible headcount control value,
6 a time buffer,
7 a thoroughness of quality control value;
8 a hiring time control value, ~~and-or~~
9 a request for information (RFI) time duration value to the project plan data.

1 16. (Original) The reliability buffering method of claim 9, further comprising:
2 updating the project plan data to provide an updated reliability buffer project plan.

1 17. (Currently Amended) A project management system comprising:
2 a project data processor to provide project plan data; and
3 a reliability buffer processor adapted to receive that the project plan data and to generate
4 a project plan with reliability buffers.

1 18. (Currently Amended) The project management system of claim 17 further including a
2 project plan processor adapted to provide conventional project plan data to the project data
3 processor, and wherein the project data processor is adapted to receive the conventional project
4 plan data and to provide the project plan data.[:]